



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Application of:

Johnson et al.

Serial No. 09/485,512

Filed: February 10, 2000

For: RECOMBINANT PORCINE
ADENOVIRUS VECTOR

Group: 1643

Examiner: U. Winkler

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10/29/01

Kay Speaker
Kay Speaker

RESPONSE TO RESTRICTION REQUIREMENT

Hon. Commissioner for Patents
Washington, D.C. 20231

Sir:

In response to the Restriction Requirement of August 28, 2001, Applicants elect Group I (claims 1, 2, 4, 25-32 and 39-42) with traverse.

It is noted that this is a Section 371 national stage application of a PCT application. No lack of unity was found by the Australian PCT Receiving Office or Preliminary Examining Authority.

It is also noted that in U.S. Serial No. 09/272,032 having similar claims to avian adenovirus vectors and uses thereof, no restriction requirement was made.

The Restriction Requirement divides the claims into three groups:

Group I, claim(s) 1, 2, 4, 25-32 and 39-42, drawn to a recombinant adenovirus vector capable of expressing a single heterologous sequence, a method of producing the vector as a vaccine and a method of vaccinating pigs against disease.

Group II, claim(s) 3, 5 and 6-24, drawn to a recombinant adenovirus vector capable of expressing multiple heterologous sequences.

Group III, claim(s) 33-38, drawn to a recombinant vaccine for optimizing cell mediated immunity.

This requirement is respectfully traversed.

MPEP Section 1850, under the heading "THE REQUIREMENT FOR UNITY OF INVENTION" requires reference to Annex B:

In applying PCT Rule 13.2 to international applications as an International Searching Authority, an International Preliminary Examining Authority and to national stage applications under 35 U.S.C. 371, examiners should consider for unity of invention all the claims to different categories of invention in the application and permit retention in the same application for searching and/or preliminary examination, claims to the categories which meet the requirements of PCT Rule 13.2.

PCT Rule 13.2, as it was modified effective July 1, 1992, no longer specifies the combinations of categories of invention which are considered to have unity of invention. Those categories, which now appear as a part of **Annex B** to the Administrative Instructions, has been substituted with a statement describing the method for determining whether the requirement of unity of invention is satisfied. Unity of invention exists only when there is a technical relationship among the claimed inventions involving one or more special technical features. The term "special technical features" is defined as meaning those technical features that define a contribution which each of the inventions considered as a whole, makes over the prior art. The determination is made based on the contents of the claims as interpreted in light of the description and drawings. [Emphasis added.]

Annex B(c) states:

(c) Independent and Dependent Claims. **Unity of invention has to be considered in the first place only in relation to the independent claims in an international application and not the dependent claims. By “dependent” claim is meant a claim which contains all the features of another claim and is in the same category of claim as that other claim (the expression “category of claim” referring to the classification of claims according to the subject matter of the invention claimed for example, product, process, use or apparatus or means, etc.).**

- (i) **If the independent claims avoid the prior art and satisfy the requirement of unity of invention, no problem of lack of unity arises in respect of any claims that depend on the independent claims. In particular, it does not matter if a dependent claim itself contains a further invention.** Equally, no problem arises in the case of a genus/species situation where the genus claim avoids the prior art. Moreover, no problem arises in the case of a combination/subcombination situation where the subcombination claim avoids the prior art and the combination claim includes all the features of the subcombination.
- (ii) If, however, an independent claim does not avoid the prior art, then the question whether there is still an inventive link between all the claims dependent on that claim needs to be carefully considered. If there is no link remaining, an objection of lack of unity *a posteriori* (that is arising only after assessment of the prior art) may be raised. Similar considerations apply in the case of a genus/species or combination/subcombination situation. [Emphasis added.]

Thus, a restriction requirement is not proper between claims which are in independent/dependent relation to each other. A dependent claim is defined in the Rules as a claim which contains all the features of another claim. The Group II and III claims are therefore dependent on a Group I claim.

The Group II claims, 3, 5 and 6-24 are all dependent on claim 2 (either directly or indirectly through intervening claims). Claim 2 is a Group I claim. Therefore, Groups I and II should not be separate.

The Group III claims, 33-38 recite all the limitations of claim 3, which is a Group II claim, which is dependent on claim 2 which is a Group I claim. Therefore Group III should not be separate from Groups I or II.

It is further noted that if the Group I claims are found to be patentable, the Group II and III claims, which contain all the limitations of Group I claim 2, should also be found to be patentable without additional searching. The International Preliminary Examination Report (copy attached along with a copy of the claims that were examined) indicates that all the claims were patentable, including claim 2.

The Examiner is thanked for the telephone discussion of this requirement. In that discussion the Examiner indicated that if operability were an issue, which it might be with respect to Group III claims reciting cell-mediated immunity, additional searching might be necessary. However, it is pointed out that Figure 14 provides evidence of stimulation of T-cells following vaccination with a vaccine produced by this invention. Thus, since operability of cell-mediated immunity has been shown, no rejection for lack of operability of this embodiment, and no searching in support of such a rejection would be necessary.

Withdrawal of the Restriction Requirement is respectfully requested.

It is believed that an extension of time of one month is due with this response and a check in the amount of \$110 in payment of the fee therefor is enclosed. If the amount

submitted is incorrect, please charge any deficiency or any additional extension of time required or credit any overpayment to Deposit Account No. 07-1969.

Respectfully submitted,

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Docket 2-00